

**AMENDMENTS TO THE CLAIMS**

The claims in this listing will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. – 6. (Canceled)

7. (Currently Amended) A method for improving affinity with a fibrin glue of a polymeric material comprising carbon or silicon as a constitutional element, the polymeric material comprising expanded polytetra-fluoroethylene or silicone, comprising irradiating at least a portion of a surface of the polymeric material expanded polytetra-fluoroethylene or silicone with ions to form an ion-modified polymeric material expanded polytetra-fluoroethylene or silicone; and applying the fibrin glue to the irradiated at least a portion of a surface of the polymeric material expanded polytetra-fluoroethylene or silicone.

8. (Currently Amended) The method according to claim 7 wherein the ion-modified polymeric material expanded polytetra-fluoroethylene or silicone includes a non-irradiated portion and the non-irradiated surface is placed into contact with dura mater.

9. (Currently Amended) The method according to claim 7 wherein the polymeric material expanded polytetra-fluoroethylene or silicone is an artificial dura mater, an artificial blood vessel, a patch for the heart or blood vessel, or a surgical suture.

10. (Currently Amended) The method according to claim 7 wherein the material comprising carbon or silicon as a constitutional element expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene (ePTFE), polylactic acid, or polyglaetin.

11. (Currently Amended) The method according to claim 7 wherein the polymeric material expanded polytetra-fluoroethylene or silicone is an artificial dura mater.

12. (Currently Amended) The method according to claim 7 wherein the irradiating at least a portion of a surface of the polymeric material expanded polytetra-fluoroethylene or silicone comprises irradiating with ions at a dose ( $\phi$ ) of  $1 \times 10^{12} \leq \phi \leq 1 \times 10^{16}$  ions/cm<sup>2</sup>.

13. (Currently Amended) The method according to claim 12 wherein the irradiating at least a portion of a surface of the polymeric material expanded polytetra-fluoroethylene or silicone comprises irradiating with ions at a dose ( $\phi$ ) of  $1 \times 10^{13} \leq \phi \leq 1 \times 10^{15}$  ions/cm<sup>2</sup>.

14. (Previously Presented) The method according to claim 12 wherein the ions include H<sup>+</sup>, He<sup>+</sup>, C<sup>+</sup>, N<sup>+</sup>, Ne<sup>+</sup>, Na<sup>+</sup>, N<sub>2</sub><sup>+</sup>, O<sub>2</sub><sup>+</sup>, Ar<sup>+</sup>, Kr<sup>+</sup>, and Xe<sup>+</sup>.

15. (Canceled)

16. (New) The method according to claim 7 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

17. (New) The method according to claim 8 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

18. (New) The method according to claim 8 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

19. (New) The method according to claim 9 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

20. (New) The method according to claim 9 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

21. (New) The method according to claim 11 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

22. (New) The method according to claim 11 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

23. (New) The method according to claim 12 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

24. (New) The method according to claim 12 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

25. (New) The method according to claim 13 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

26. (New) The method according to claim 13 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

27. (New) The method according to claim 14 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.